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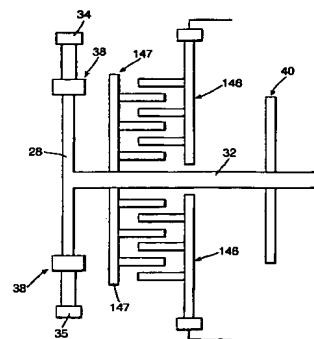
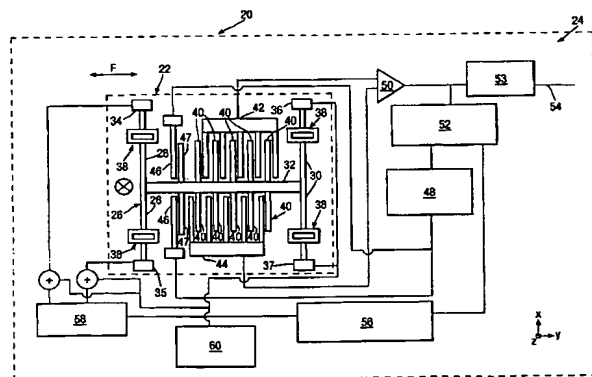
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(54) Title: **RESONANT MAGNETOMETER DEVICE**



(57) Abstract: A resonant magnetometer (20) is described that comprises a substrate having a member (26) and means for passing an alternating current (AC) through said oscillatory member (26). The magnetometer is characterised in that driving means (46, 48) are also provided to impart a magnetic field independent oscillatory force to said oscillatory member (26). A micro-electromechanical systems (MEMS) implementation of the magnetometer is described.